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Administration of the Tablet Formulation of Olaparib in Patients with Ovarian Cancer: Practical Guidance and Expectations

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Disclosures of potential conflicts of interest may be found at the end of this article.

Key Words. Olaparib, tablet • Poly(ADP-ribose) polymerase inhibitor • Ovarian cancer • *BRCA* mutation

Abstract

Olaparib is a poly(ADP-ribose) polymerase enzyme inhibitor that is approved for use in patients with advanced ovarian cancer (OC) and genetic *BRCA1/2* mutations who have received three or more prior lines of chemotherapy for maintenance treatment of recurrent OC that is in response to platinum-based chemotherapy regardless of *BRCA* mutation status and for human epidermal growth receptor factor 2-negative metastatic breast cancer with deleterious or suspected deleterious germline *BRCA* mutations who have previously been treated with chemotherapy in the neoadjuvant, adjuvant, or metastatic setting. Because olaparib is poorly soluble and requires advanced drug delivery techniques to ensure bioavailability, the originally approved 400 mg dose is taken as eight 50 mg capsules twice daily. An alternative melt-extrusion tablet formulation was developed to improve the pharmacokinetic and pharmacodynamic profile of olaparib and reduce the pill burden for patients. The recommended tablet dose is 300 mg twice daily (two 150 mg tablets). Phase III studies with the tablet formulation are ongoing for multiple tumor types. Two studies conducted with the olaparib tablet formulation have reported results: one in platinum-sensitive, *BRCA*-mutated recurrent OC (SOLO-2) and one that included patients with germline *BRCA*-mutated metastatic breast cancer (OlympiAD). The tablet is the approved formulation based on the SOLO-2 trial results. Because the capsule and tablet formulations have different bioavailability, physicians must strictly adhere to the dosing instructions provided in the prescribing information. The tablet offers greater convenience for most patients, especially when using olaparib for maintenance therapy. This review discusses the differences between the two formulations, dose determination, and guidance for use of olaparib tablets by patients with OC. Prior to implementing any changes in therapy, health care providers should engage their patients in discussion to support an informed transition between the formulations. ***The Oncologist*** 2018;23:697–703

Implications for Practice: Olaparib has recently been approved for maintenance treatment of recurrent ovarian cancer (OC) that is in response to platinum-based chemotherapy. The originally approved capsule formulation was dosed as 400 mg twice daily (eight 50 mg capsules). The recommended olaparib tablet dose is 300 mg twice daily (two 150 mg tablets). The tablet is the new approved formulation based on the SOLO-2 trial results. Because the capsule and tablet formulations have different bioavailability, physicians must strictly adhere to the dosing instructions provided in the prescribing information. The tablet offers greater convenience for most patients, especially when using olaparib for maintenance therapy. This review discusses the differences between the two formulations, dose determination, and guidance for use of olaparib tablets by patients with OC.

Introduction

The poly(ADP-ribose) polymerase (PARP) enzymes fulfill essential roles in DNA single-strand and double-strand break repair [1]. The tumor suppressors *BRCA1* and *BRCA2* are required for the DNA repair of double-strand breaks [1–3]. When the wild-type allele is lost in *BRCA*-deficient tumor precursors, homologous recombination repair mechanisms become faulty, and the resulting genomic instability sensitizes the *BRCA*-deficient tumor cells to PARP inhibition [4–6]. Olaparib, a potent oral inhibitor of PARP 1 and 2, functions by trapping PARP 1 at sites of DNA damage, which leads to the collapse of DNA replication forks, the accumulation of DNA double-strand breaks, and the eventual death of the cell [2, 7].

Olaparib is approved to treat patients with advanced ovarian cancer (OC) and germline *BRCA1/2* mutations (g*BRCA*m) who have received three or more prior lines of chemotherapy, for use as maintenance therapy in patients with recurrent OC who are in a complete or partial response to platinum-based chemotherapy, regardless of *BRCA* mutation status and for

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human epidermal growth receptor factor 2 (HER2) negative metastatic breast cancer (BC) with deleterious or suspected deleterious g*BRCA*m who have previously been treated with chemotherapy in the neoadjuvant, adjuvant, or metastatic setting [8, 9]. A phase I study of pharmacokinetic (PK) and pharmacodynamic characteristics of olaparib capsules in patients with confirmed advanced solid tumors established the maximum tolerated dose (MTD) as 400 mg twice daily (BID) and the minimal biologically effective dose as >60 mg BID [10]. The dose of 400 mg BID originally approved in the U.S. in 2014 is eight 50 mg capsules BID (16 capsules per day) [9, 11], which may represent an undue pill burden to some patients. The 300 mg tablet dose given as two 150 mg tablets BID may offer greater convenience for patients with OC [8]. By reducing pill burden, the tablet formulation is expected to improve outcomes by simplifying treatment complexity and improving patient adherence and satisfaction [12–14]. However, various challenges remain with regard to patient compliance and educating patients and providers about the differences between the two formulations. This review describes the adaptive analysis that determined the optimal olaparib tablet dose for patients and highlights the clinical considerations in reassignment of olaparib therapy from capsule to tablet.

Pivotal Registration Studies for Capsule and Tablet Formulations

Olaparib received U.S. Food and Drug Administration (FDA) accelerated approval in 2014 based on the objective response rate (ORR) and duration of response (DoR) demonstrated in Study 42 (NCT01078662), a single-arm, phase II study of patients with advanced cancer and g*BRCA*m [11, 15]. Patients were treated with olaparib capsules (400 mg BID) until disease progression [11]. In a subgroup analysis of patients with OC and confirmed g*BRCA*m previously treated with three or more lines of chemotherapy ($n = 137$), the ORR was 34% (2% with complete response) and the overall median DoR was 7.9 months [9, 15]. A subsequent pooled analysis from six completed single-agent olaparib studies found that the ORR was 31% and DoR was 7.8 months for patients who received three or more lines of prior chemotherapy, which provided additional support for treatment with olaparib in this setting [16].

Study 19 (NCT00753545) was a phase II maintenance study that compared olaparib capsules (400 mg BID) with placebo in patients with platinum-sensitive recurrent OC who had received at least two lines of platinum-based chemotherapy. The primary outcome measure was investigator-assessed progression-free survival (PFS), and the group that received olaparib ($n = 136$) had a statistically significant improvement in median PFS versus placebo ($n = 129$; hazard ratio [HR], 0.35; 95% confidence interval [CI], 0.25–0.49; 8.4 vs. 4.8 months; $p < .0001$) [17].The overall survival (OS) analysis after 5 years of follow-up found that olaparib provided a long-term treatment benefit compared with placebo (HR, 0.73; 95% CI, 0.55–0.95; OS, 29.8 vs. 27.8 months). The g*BRCA*m subgroup derived a greater survival benefit (HR, 0.62; 95% CI, 0.41–0.94; 34.9 vs. 30.2 months). In addition, 13% (18/136) of patients received olaparib for 5 years or more. The median time to first subsequent treatment was longer for olaparib-treated patients in the overall study population and for the subpopulations of patients with g*BRCA*m ($n = 136$) and *BRCA* wild type ($n = 118$); all $p < .001$ [18]. A retrospective biomarker analysis conducted in patients who received olaparib for at least 6 years found that 5 of 15 were *BRCA* wild type but continued to have a durable response [19]. These results support the rationale for olaparib in maintenance treatment regardless of *BRCA* mutation status.

The SOLO-2 study (ENGOT-Ov21, NCT01874353) was the basis for the FDA approval of olaparib tablets (300 mg BID) for use in the maintenance setting. Patients with platinum-sensitive relapsed OC and g*BRCA*m who demonstrated a complete or partial response after platinum-based therapy were randomized to receive either olaparib tablets (300 mg BID) or placebo until disease progression. Olaparib maintenance monotherapy provided a statistically significant improvement versus placebo in investigator-assessed median PFS (the primary endpoint), which was 19.1 months for olaparib versus 5.5 months for placebo (HR, 0.30; 95% CI, 0.22–0.41; $p < .001$). The sensitivity analysis of PFS by blinded independent central review also favored olaparib over placebo (HR, 0.25; 95% CI, 0.18–0.35; $p < .001$) [20]. The safety profile for patients treated with olaparib tablets was consistent with those observed for the approved capsule formulation. Nausea, vomiting, fatigue or asthenia, and anemia were the most common adverse events (AEs) reported in patients from the olaparib-treated arm in SOLO-2, but most of these incidents were grade 2 or below [21]. Dose interruption was used to manage any treatment-related AE that was grade ≥3. If an interruption was insufficient to manage the AE, dose reductions to 250 mg BID or 200 mg BID could be used as well. The majority of AEs were manageable with supportive treatment, dose interruption, or dose reduction, and the rate of discontinuation because of AEs was low (11% in the olaparib-treated arm vs. 2% in the placebo-treated arm) [21]. The results from SOLO-2 confirmed that the olaparib tablet formulation provides significant benefit as a maintenance therapy for these patients.

Determination of Olaparib Tablet Dosing Regimens

Pharmacokinetic Comparison of the Capsule and Tablet Formulations

Numerous studies conducted in a variety of chronic conditions have demonstrated that higher pill burdens contribute to lower adherence and subsequently less favorable outcomes, which can adversely affect quality of life [22–27]. Therefore, an alternative melt-extrusion tablet formulation with similar or greater relative bioavailability was developed to improve olaparib bioavailability and lower daily pill burden from the capsule dose of 16 capsules.

Study 24 was conducted to compare the PK of the olaparib tablet formulation with those of the capsule and to collect preliminary efficacy and safety data to determine the appropriate tablet monotherapy dose for use in subsequent phase III trials [28]. In the bioavailability analysis, the PK of capsule and tablet doses were compared in patients with advanced solid tumors. In tablet form, olaparib was rapidly absorbed with maximum plasma concentrations reached at 0.5 to 2 hours after dosing. After repeated tablet dosing, the steady-state exposure of olaparib 300 mg or higher matched or exceeded that of the olaparib capsule 400 mg dose; olaparib 200 mg tablets exhibited similar maximum concentrations at steady state but a lower area under the concentration-time curve at steady-state and

Table 1. Comparison of olaparib capsule and tablet pharmacokinetics and bioavailability during the dose-expansion phase

Characteristic	300 mg BID tablet ($n = 17$), mean (range)	400 mg BID tablet $n = 10$), mean (range)	400 mg BID capsule ($n = 17$), mean (range)
$C_{max,ss}$, μg/mL	9.37 (2.28–14.7)	12.0 (8.45–16.9)	6.36 (3.88–13.3)
$AUC_{0–12,ss}$, μg × h/mL	58.4 (23.1–96.0)	72.8 (44.8–106)	41.5 (18.7–147)
$C_{min,ss}$, μg/mL	1.84 (0.34–3.83)	2.01 (0.76–3.61)	1.04 (0.23–8.49)

Only patients remaining on the starting dose at day 29 were included in the summary statistics. All data are expressed as geometric mean (range).
Abbreviations: $AUC_{0–12,ss}$, area under the concentration-time curve from 0 to 12 hours at steady state; BID, twice daily; $C_{max,ss}$, maximum concentration at steady state; $C_{min,ss}$, minimum concentration at steady state.
Data represent Group 6 from Mateo et al., 2016 [28].

minimum concentration at steady state than the 400 mg tablets (Table 1) [28]. Because of differences in relative absorption rates and exposure, the tablet and capsule have different bioavailability [28].

Safety Comparison of the Capsule and Tablet Formulations

The second stage of Study 24 determined the MTD, safety, and tolerability of the selected olaparib tablet dose and compared it with the capsule in patients with advanced g*BRCA*m OC and BC. Patients were assigned to various dose escalation groups. A full analysis of the study was published previously [28]. Results for the tablet dosed at 300 mg BID (two 150 mg tablets), the tablet dosed at 400 mg BID (two 150 mg tablets and one 100 mg tablet), and the capsule dosed at 400 mg BID (eight 50 mg capsules) are reported in this review. For simplification, BID dosing is implied in this section. Although the MTD of the tablet was 400 mg, the 300 mg dose led to fewer AEs and dose reductions, indicating better tolerability, which supported this dose as a more ideal choice [28]. Anemia was the most common grade $\geq$3 AE in the 300 mg (22%) and 400 mg tablet (30%) groups. A summary of grade $\geq$3 AEs occurring in patients receiving either the 300 mg and 400 mg tablet doses or capsule doses of 400 mg is provided in Table 2 [28].

For all tablet doses, the most common AEs leading to more than one dose reduction were anemia, gastrointestinal disorders, and fatigue [28]. Dose reductions and interruptions occurred more frequently among patients who received the 400 mg BID tablet dose than for patients randomized to the 300 mg tablet dose or for patients who received the capsule administered at 400 mg. Therefore, the overall toxicity profile of the 400 mg BID tablet dose was not considered acceptable.

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Efficacy Comparison of the of Capsule and Tablet Formulations

In Study 24, antitumor activity was also assessed in g*BRCA*m carriers with OC. The ORR was 30% across all cohorts, but it was 38% among patients receiving tablets administered at 300 mg and 42% for those receiving 400 mg. The response rate based on RECIST and/or cancer antigen 125 (CA-125) was 40% (21/53) across all OC cohorts [28]. In other efficacy measures, the percentage change in tumor size over 8 weeks suggested similar results for both tablet formulation doses (300 and 400 mg) compared with capsules at 400 mg. Similar results, in terms of tumor shrinkage, were observed at 16 weeks (Table 3; Fig. 1A, B, C, D) [28].

Clinical Considerations for Prescribing Olaparib Tablet Therapy

The consistency of clinical outcomes between the 300 mg tablet dose and the 400 mg capsule dose options indicate no evidence of a detrimental effect upon the benefit-risk profile of the tablet formulation. Indeed, the tablet formulation offers similar efficacy and safety with a lower pill burden; however, it is important to reiterate that the capsule and tablet have different bioavailability, which is why the dose is lower for the tablet formulation. Bioequivalence is defined as the absence of a significant difference in the rate and extent to which the active ingredient becomes available at the site of drug action when administered at the same molar dose under similar conditions in a clinical study [29]. Consequently, the olaparib tablet and capsule are not interchangeable, and the formulations must not be considered bioequivalent on a milligram to milligram conversion basis; such conversion factors are not recommended and may result in under- or overdosing. No study has been conducted to investigate the effects of switching patients from olaparib capsules to the tablet formulation. Therefore, clinicians are instructed to use their best judgment when transitioning a patient from the capsule to tablet formulation. In our experience thus far, patients have viewed the transition from the capsule to the tablet formulation positively overall. The lower pill burden with the tablet formulation appeals to patients and has not been equated with less efficacy. We typically start our patients at the full tablet dose and closely monitor for hematological adverse effects. Patients who received a reduced dose because of gastrointestinal toxicities with the capsule formulation are transitioned to the full tablet dose and monitored closely for a recurrence of gastrointestinal symptoms; dose reductions are administered as needed. Physicians should also take extra care to review prescriptions to ensure that their patients are receiving the proper dosing instructions for the tablet formulation, particularly during the transition period when pharmacies are first adding the tablets to their formularies.

The recommended dose for olaparib tablets is 300 mg BID, administered as two 150 mg tablets. However, dose adjustments and interruptions can be used to manage treatment-

Table 2. Summary of grade ≥3 adverse events (occurring in more than one patient) during BID tablet and capsule treatment

AE	300 mg BID tablets (*n* = 18), *n* (%)	400 mg BID tablets (*n* = 17), *n* (%)	400 mg BID capsules (*n* = 18), *n* (%)
Any grade ≥3 AE	11 (61)	10 (59)	7 (39)
Blood and lymphatic system disorders			
Anemia	4 (22)	5 (30)	4 (22)
Neutropenia	2 (11)	0	1 (6)
Thrombocytopenia	0	3 (18)	0
Gastrointestinal disorders			
Abdominal pain	2 (11)	0	0
Diarrhea	2 (11)	0	0
Nausea	0	2 (12)	0
Vomiting	0	0	1 (6)
General disorders			
Fatigue	3 (17)	2 (12)	0
Musculoskeletal disorders:			
Musculoskeletal pain	0	1 (6)	0
Respiratory, thoracic, and mediastinal disorders			
Dyspnea	0	1 (6)	0

Abbreviations: AE, adverse event; BID, twice daily.
Data represent Group 6 from Mateo et al., 2016 [28].

Table 3. Percent change in tumor size at weeks 8 and 16 in the olaparib dose-expansion groups in patients with ovarian cancer and germline *BRCA* mutations

Change in tumor size	300 mg BID tablet (*n* = 13)	400 mg BID capsule (*n* = 13)	400 mg BID tablet (*n* = 12)
Week 8			
Unadjusted mean, %	−16.8	−17.0	−28.7
LSM[a], %	−16.1	−17.9	−28.4
Treatment effect[a]			
Difference in LSM, %	1.8	−10.5	
80% CI, %	−14.0–17.6	−26.6–5.6	
95% CI, %	−22.8–26.4	−35.5–14.6	
Two-sided *p* value	.881	.401	
One-sided 80% UCL, %	12.1	0.0	
Week 16			
Unadjusted mean, %	−11.5	−16.3	−26.6
LSM[a], %	−10.6	−17.6	−26.2
Treatment effect[a]			
Difference in LSM, %	7.0	8.6	
80% CI, %	−16.1–30.0	−32.1–14.9	
95% CI, %	−28.9–42.8	−45.1–28.0	
Two-sided *p* value	.696	.637	
One-sided 80% UCL, %	22.0	6.8	

[a]Adjusted for baseline tumor size. Radiological assessments were performed every 8 weeks according to RECIST, version 1.0.
Abbreviations: BID, twice daily; CI, confidence interval; LSM, least squares mean; UCL, upper confidence limit.
Data represent Group 6 from Mateo et al., 2016 [28].

related adverse reactions. To manage adverse reactions, consider interruption of treatment or dose reduction, with a recommended reduction to 250 mg (one 150 mg tablet and one 100 mg tablet) BID, for a total daily dose of 500 mg. If further dose reduction is required, then reduce the dosage to 200 mg (two 100 mg tablets) BID, for a total daily dose of 400 mg. Olaparib tablets are available in 150 mg and 100 mg doses to facilitate dose reductions as needed [8] (Fig. 2). Supportive care

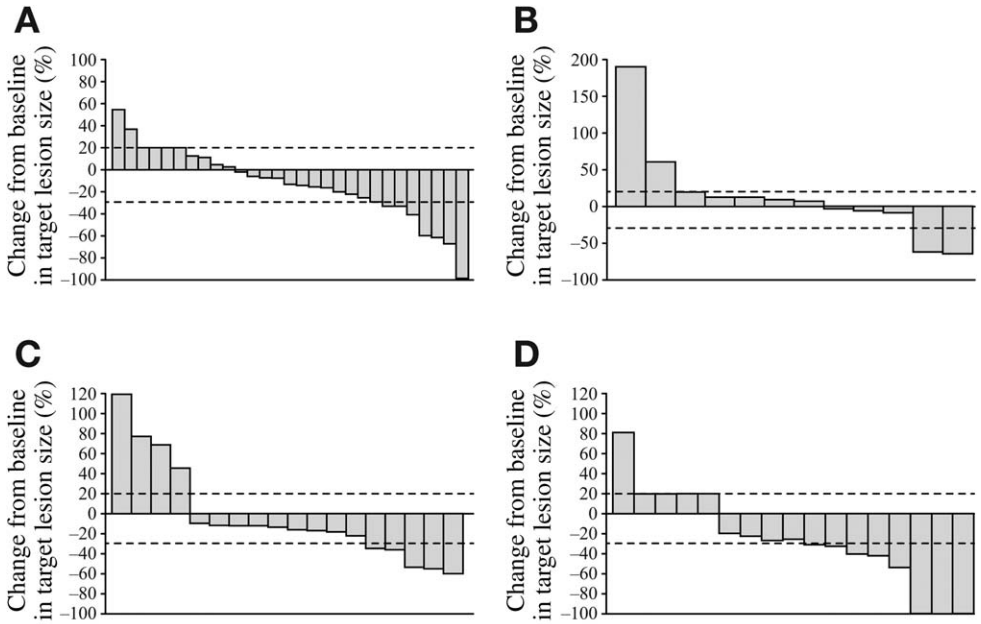

Figure 1. Percentage change in target lesion size at 16 weeks. **(A)**: After multiple dosing of olaparib capsule 400 mg twice daily (BID; $n = 29$). **(B)**: After multiple dosing of the 200 mg tablet BID ($n = 13$). **(C)**: After multiple dosing of the 300 mg tablet BID ($n = 18$). **(D)**: After multiple dosing of the 400 mg tablet BID ($n = 18$) [28]. Adapted with permission from Mateo et al., 2016 [28].

Figure 2. Olaparib capsule and tablet formulations. **(A)**: Olaparib 50 mg capsule. **(B)**: Olaparib 150 mg tablet. **(C)**: Olaparib 100 mg tablet.

can also be used to manage certain treatment-related AEs. Proactive and assertive management of nausea and vomiting are the cornerstone of helping patients maintain treatment adherence to olaparib without major detriment to quality of life. For low-grade nausea and vomiting, prescribe prochlorperazine, 5-HT3 antagonists, or another preferred antiemetic. For grade 2 or higher, consider a dose interruption or add a second antiemetic, and restart olaparib (at a reduced dose, if necessary) once the symptoms subside to grade 1 or below. Fatigue is another common side effect for patients taking olaparib. Nonpharmacological options for fatigue management include massage therapy, cognitive behavioral therapy, other psychosocial methods, exercise if possible, and maintenance of physical fitness. Management of underlying conditions that may contribute to fatigue, such as pain, depression, or sleep disturbance, is also crucial. If necessary, the psychostimulant methylphenidate can also be used to improve fatigue symptoms. If fatigue persists despite addressing non-treatment-related causes, a dose reduction or interruption with restarting at a reduced dose as described above can also be used [30].

Olaparib is a long-term therapy, and key questions for clinicians revolve around medication adherence for patients with cancer who are prescribed tablets [12]. For example: What are the most serious concerns facing the patient with OC receiving olaparib capsules or tablets (e.g., distress, side effects)? What are the challenges for patients prescribed olaparib capsules versus tablets in the long-term compared with patients receiving a short-term medication (e.g., nonadherence)? Prior to any reassignment from olaparib capsules to tablets, an active discussion between the clinician and patient may be warranted to explain the dose administration regimen and to support the patient in making the transition from capsule to tablet.

Patient-Focused Perspectives

Patient adherence is known to be influenced when the appearance of the pill changes (i.e., a generic prescription drug by a different manufacturer is dispensed in a different size, shape, or color) [31]. Changes in therapy from the olaparib capsule to tablet may have a similar effect on patient adherence when patients previously receiving capsules receive the tablet formulation for convenience. Patients should be counseled regarding the safety profile of olaparib when initiating olaparib tablet therapy, because AEs represent a significant reason for patients to become nonadherent [30]. Conversations between patients and clinical staff to recognize and overcome faltering adherence after a change in therapy, because of either nonadherence to medication or inaccurate dosing, are critical.

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When surveyed regarding the efficacy of medications in general, patients perceive capsules to be stronger than tablets [32–34], although this has not been reported in patients receiving olaparib in particular. This perceived preference for capsules over tablets appears to play a role in forming expectations of

drug action and efficacy. Hence, some patients may expect that olaparib capsules may provide more favorable treatment effects than tablets. Patients may also equate fewer pills with lack of efficacy—the opposite of the placebo effect—whereas patients on more pills may think they are receiving more treatment [35]. It is important to communicate to patients that although they are taking fewer tablets each day, they are still receiving an effective dose of olaparib.

Although consuming food when taking olaparib decreases the peak exposure of the drug and slows its rate of exposure, it does not alter the extent of absorption in the patient [36]; thus, in many ongoing olaparib phase III clinical studies, patients are permitted to take the tablet with a light snack. Food imposes no impact on interpatient variability of PK [36]. Patients might be expected to have a greater satisfaction along with the convenience of taking the medication with food.

Overall, the importance of minimizing the impact on health-related quality of life (HRQOL) while providing effective disease control is a top priority for practitioners. This importance is reflected in clinical study designs that include HRQOL outcome measures. In SOLO-2, the primary HRQOL endpoint was a change from baseline in the Trial Outcome Index (TOI), an established single-targeted index derived from the Functional Assessment of Cancer Therapy-Ovarian (FACT-O) questionnaire. This outcome measure included an assessment of relevant OC symptoms, as well as functional and physical well-being. Treatment with olaparib did not negatively affect mean TOI scores over a 12-month period [37]. Patients treated with olaparib also experienced a significantly longer quality-adjusted PFS than placebo-treated patients (17.6 months vs. 8.9 months, respectively; $p < .001$), as well as a significantly longer time without symptoms of disease or toxicity (13.5 months vs. 7.2 months, respectively; $p < .001$) [37]. Similar results were seen in Study 19, in which olaparib maintenance therapy was found to have no detrimental effects on HRQOL for patients with platinum-sensitive relapsed high-grade OC [38]. Taken together, the results from these studies suggest that olaparib can provide effective treatment without deteriorating HRQOL in patients with platinum-sensitive relapsed or recurrent OC.

Olaparib Therapy: Current Applications and Those on the Horizon

SOLO-2 confirmed the efficacy and safety of the olaparib tablet formulation in patients with platinum-sensitive, recurrent OC with g*BRCA*m. However, the olaparib tablet has also demonstrated efficacy and safety in patients with metastatic BC. The OlympiAD study (NCT02000622) evaluated the efficacy and safety of monotherapy olaparib tablets 300 mg BID versus standard treatment (capecitabine, eribulin, or vinorelbine in 21-day cycles) in patients with HER2-negative, metastatic BC and g*BRCA*m, regardless of hormone receptor status [39]. Median PFS was significantly longer in the olaparib-treated group than in the standard treatment group (7.0 months vs. 4.2 months, respectively; HR for disease progression or death, 0.58; 95% CI, 0.43–0.80; $p < .001$). The AE profile was similar to that of other trials; the rates of AE grade 3 or higher were 36.6% in the olaparib-treated group and 50.5% in the standard-therapy-treated group, with a low rate of discontinuation because of toxicity (4.9% vs. 7.7%, respectively) [39]. The results from OlympiAD are notable because it is the first phase III study to demonstrate a therapeutic benefit for PARP inhibitor monotherapy versus standard therapy in patients with HER2-negative metastatic BC and g*BRCA*m. Olaparib recently (in January 2018) received FDA approval for treatment of this patient population.

There are a number of ongoing phase III studies of the olaparib tablet monotherapy and combination therapy in multiple tumor types, including breast (NCT02032823, NCT03150576), ovarian (NCT01844986, NCT02282020, NCT02477644, NCT03106987, NCT01874353), prostate (NCT02987543), gastric (NCT01924533), and pancreatic cancers (NCT02184195).

Conclusion

A tablet formulation of olaparib with improved bioavailability has been developed to facilitate olaparib administration to patients. Although the two formulations have different bioavailability, the tablet formulation (two 150 mg tablets BID for a total of 300 mg) is clinically equivalent to the capsule formulation (eight 50 mg capsules BID for a total of 400 mg), with a lower pill burden. In a phase I study designed to compare the PK, efficacy, and tolerability of the olaparib capsule and tablet formulations, efficacy was similar for both formulations, and the tablet formulation demonstrated an improved tolerability profile.

The development of the olaparib tablet is a significant step forward in the treatment of ovarian and breast cancer and is designed to reduce pill burden in patients without compromising efficacy or safety. Clinicians should counsel patients who had been taking olaparib capsules about the change in formulation and pay special attention to the revised dosing regimen in all patients starting olaparib tablets as the new formulation enters local formularies. Greater convenience may encourage increased adherence to this long-term regimen.

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